

REMARKS

The Examiner has indicated that the subject matter of claims 26 through 29 are allowable providing that claim 26 is amended to meet the Sec. 112 objections. Applicants hereby submit an amended claim 26 and retains claims 22-29.

The Examiner has indicated that claims 30 through 34 are rejected either as being anticipated by Daniel or as being obvious over Daniel; with claim 33 also being rejected as being unpatentable over the Miller '626 reference.

Applicants hereby submit a new set of claims 35 through 39 to replace the claims 30 through 34 rejected over prior art.

With respect to the new claims 35-39, Applicants appreciate the Examiner's comment with respect to the Daniel '064 patent. Even though this patent had been previously recited, focus had not been had on the structure shown in FIGs. 12, 13A and 13B. A review of that structure has caused Applicants to provide the new set of claims 35-39 to adequately distinguish over Daniel.

Claim 35 is directed to the blocking arrangement 18, 20 at the distal end of the catheter 16. By contrast the allowable claim 26 is directed to the combination of this blocking arrangement and the occlusion engaging element 22, 24. Claim 35 has some similarities to canceled claim 34. But claim 35 is completely rewritten to more explicitly and distinctly distinguish over the designs shown in Daniel and in particular the design shown in FIG. 12 and the design shown in FIG. 13A and 13B of Daniel '064.

One of the key structural differences between Applicants' occlusion removal device and the Daniel emboli capturing system concerns the distal end of the catheter.

In Applicants' device, the distal end is open and in the Daniel device, the distal end is closed. This structural distinction is at the heart of the difference between the Daniel

filter assembly to catch stenosis fragments and Applicants' device to remove occluded blood; particularly in the context of the occlusion that occurs throughout the graft 10 that is employed in hemodialysis.

Accordingly, the occluded blood which is to be removed by Applicants' device has to be pushed into the catheter so that it can be removed and the hemodialysis sheath or other passageway cleared. By contrast, in the Daniel system, the fragments that may be created when the stenosis 26 is compressed are caught by the mesh taught by Daniel. The Daniel mesh has to be open enough to permit the blood to flow through and the stenosis fragments to be caught.

An interesting sidelight on these two different applications is that in Daniel the mesh which catches the fragments has to be downstream from the stenosis involved. By contrast in Applicants' arrangement, the occluded blood 34 is neither particularly upstream or downstream because it is to be swept out of the vessel or graft by relative motion of open end catheter and engaging element.

As a consequence, claim 35 (and the rest of the claims) specifies that the occlusion material is removed in a proximal direction from a position distal of the open end of the catheter and that the occlusion material will enter the lumen of the catheter through the open distal end and will also be blocked from proximal movement along the body passageway external of the catheter because of the blocking element.

Applicants believe that the specification of the distinct structural difference between their design and the Daniel design not only distinguishes the two designs but is a difference that is rendered non-obvious by the fact that the two designs are directed to different purposes. That is, there is nothing in Daniel that would lead one to applicants' design. The two devices perform substantially different functions (one is to catch loose stenosis flowing downstream and the other is to

remove occluded blood. These two different functions require the addressing of different problems and thus any structure found in one of these devices would not obviously be incorporated in the other devices.

However, Applicants understand that the language of the claims has to recite the structural differences and, with reference to claim 35, Applicants point out at least the following two distinct differences:

1. Applicants claim an open-ended catheter. Daniel's catheter is closed.

2. Applicants claim a blocking device near the end of the catheter that blocks proximal movement of occluded material from movement along the body passageway external of the catheter. By contrast, Daniel catches stenosis moving downstream and permits blood to flow downstream through the filter.

Claim 38 is a method claim which also differs from the teachings of Daniel. Claim 38 specifically calls for using the expanded state of the blocking mechanism to block proximal passage of occlusion material around the outside of the catheter and also calls for proximally moving the occlusion material through the open-end of the catheter into the lumen.

Applicants appreciate that the canceled method claim 33 was rejected as unpatentable over the Miller '625 patent. Applicants believe that the independent method claim 38 distinctly distinguishes over the Miller '625 patent. The Miller filter, like the Daniel capturing mesh, are both devices to permit the flow of blood therethrough while capturing particles to prevent these particles (emboli, thrombi, stenosis fragments, etc.) from flowing downstream. The new method claim 38 is now specifically directed to Applicants' technique which includes blocking proximal passage of occlusion material around the outside of the catheter and provides for proximally moving

occlusion material through the open-end of the catheter into the lumen.

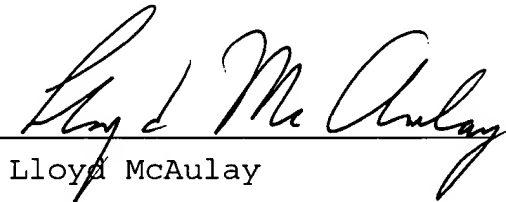
Applicants believe that these revised claims adequately distinguish over the prior art both structurally and functionally. In large part because of the significant functional difference and different problems addressed, the structural differences are believed to be non-obvious.

Accordingly, Applicants believe that the claims are in condition for allowance and such is respectfully requested.

Respectfully submitted,

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Lloyd McAulay

Reg. No. 20,423

Attorney For Applicants

Reed Smith LLP

375 Park Avenue, 17 Fl.

New York, NY 10152

Telephone No: (212) 521-5461

Fax No. (212) 521-5450